

***Listing of the Claims***

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Previously presented) An assay for detecting or quantifying A $\beta$  peptide which may be present in a candidate solution, comprising:

(a) contacting the candidate solution with a solid support with a heavy metal cation immobilized thereon to capture A $\beta$  peptide on the surface of the solid support, thereby forming a first complex which comprises solid support/heavy metal cation/A $\beta$  peptide;

(b) blocking all exposed metal binding sites remaining after A $\beta$  capture with a blocker;

(c) contacting the first complex, which has been passed through step (b), with a polyclonal antibody specific for A $\beta$  peptide to form a second complex which comprises solid support/heavy metal cation/A $\beta$  peptide/polyclonal antibody specific for A $\beta$  peptide;

(d) labelling the second complex to form a detectable third complex which comprises solid support/heavy metal cation/A $\beta$  peptide peptide/polyclonal antibody specific for A $\beta$  peptide/label; and

(e) detecting the third complex, and quantifying A $\beta$  peptide which may be present in the candidate solution.

2. (Previously presented) An assay for detecting or quantifying A $\beta$  peptide which may be present in a candidate solution, comprising:

- (a) contacting the candidate solution with a solid support with a heavy metal cation immobilized thereon to capture A $\beta$  peptide on the surface of the solid support, thereby forming a first complex which comprises solid support/heavy metal cation/A $\beta$  peptide;
- (b) blocking all exposed metal binding sites remaining after A $\beta$  capture with a blocker;
- (c) contacting the first complex, which has been passed through step (b), with a polyclonal antibody specific for A $\beta$  peptide, called A $\beta$  antibody, to form a second complex which comprises solid support/heavy metal cation/A $\beta$  peptide/A $\beta$  antibody;
- (d) contacting said second complex with one or more anti-antibodies specific to the A $\beta$  antibody to form a third complex which comprises solid support/heavy metal cation/A $\beta$  peptide/A $\beta$  antibody/one or more anti-antibodies;
- (e) labelling said third complex to form a detectable fourth complex which comprises solid support/heavy metal cation/A $\beta$  peptide/A $\beta$  antibody/one or more anti-antibodies/label; and
- (f) detecting the fourth complex, thereby quantifying A $\beta$  peptide which may be present in the candidate solution.

3. (Previously presented) The assay as claimed in claim 1, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

4. (Previously presented) The assay as claimed in claim 2, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

5 – 16. (Cancelled)

17. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a polyclonal antibody specific for A $\beta$  peptide.

18. (Previously presented) The kit as claimed in claim 17, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

19. (Previously presented) The kit as claimed in claim 17, wherein said antibody is labeled with a radioisotope.

20. (Currently amended) The kit as claimed in claim 17, wherein said ~~enzyme is horseradish peroxidase antibody is labeled with an enzyme.~~

21. (Previously presented) The kit as claimed in claim 17, wherein said carrier means further comprises a third container means containing an anti-antibody which is specific for the A $\beta$  antibody.

22. (Previously presented) The kit as claimed in claim 21, wherein said anti-antibody is labeled with a radioisotope.

23. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a labelled polyclonal antibody specific for A $\beta$  peptide.

24. (Previously presented) The kit as claimed in claim 23, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

25. (Previously presented) The kit as claimed in claim 23, wherein the labeled antibody is labeled by a radioisotope.

26. (Currently amended) The kit as claimed in claim 23, wherein said ~~enzyme is horseradish peroxidase~~ antibody is labeled with an enzyme.

27. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a polyclonal antibody specific for A<sub>β</sub> peptide bound to a labelled anti-antibody.

28. (Previously presented) The kit as claimed in claim 27, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

29. (Previously presented) The kit as claimed in claim 27, wherein the labeled antibody is labeled by a radioisotope.

30. (Previously presented) The kit as claimed in claim 27, wherein said ~~enzyme is horseradish peroxidase~~ labeled antibody is labeled with an enzyme.

31 - 34. (Cancelled)

35. (New) The kit as claimed in claim 20, wherein said enzyme is horseradish peroxidase.

36. (New) The kit as claimed in claim 26, wherein said enzyme is horseradish peroxidase.

37. (New) The kit as claimed in claim 30, wherein said enzyme is horseradish peroxidase.